

Model General Permit Template

SERIES 13 Tanks

Template # SJV-TK-13-0

external floating roof tank

tank not used at drilling and production facility prior to custody transfer

storage capacity greater than or equal to 140,567 gallons)

construction, modification, or reconstruction commenced after July 23, 1

true vapor pressure greater than 1.5 psia and less than 11 psia

This template is designed to streamline the Title V permitting process for tanks meeting the above qualifications. Applicants for Title V permits choosing to use this template will only have to complete the enclosed template qualification form and submit it with their Title V application.

San Joaquin Valley Unified Air Pollution Control District

**Final
Title V Model General Permit Template
Series 13 Tanks**

Template No: SJV-TK-13-0

PREPARED BY:

**Lars C. Story II
Air Quality Engineer**

Other Contributors: Beverly Boucher, Air Quality Engineer
Karen Tani, Air Quality Engineer

REVIEWED BY:

**Rick McVaigh
Permit Services Manager**

APPROVED BY:

**Seyed Sadredin
Director of Permit Services**

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SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

TITLE V GENERAL PERMIT TEMPLATE SJV-TK-13-0

ENGINEERING EVALUATION

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I. Purpose

The purpose of the proposed template is to streamline the Title V permitting process and reduce the time required by the applicant and the District by identifying the federally applicable requirements for tanks and establishing permit conditions which will ensure compliance with such requirements. These conditions will be incorporated into the Title V permit of any facility choosing to make use of the template.

II. Template Applicability

The template applies to any organic storage tank which:

Is equipped with an external floating roof, and

Commenced construction, modification, or reconstruction after July 23, 1984, and

Stores a volatile organic liquid which has a true vapor pressure greater than 1.5 psia but not exceeding 11psia, and

Has a storage capacity greater than or equal to 40 m³ (10,567 gallons).

The applicability of this template is determined by completion of the Template Qualification Form (TQF) attached as Appendix C. The completed and signed TQF for each qualifying unit must be submitted with the Title V application.

III. Applicable Requirements

Units may be subject to “federally enforceable” requirements as well as requirements that are enforceable by the “District-only”. Federally enforceable requirements will be enforceable by the EPA, the District, and the public through Title V permit conditions identified as federally enforceable. District-only requirements represent local or state regulations for which the EPA has no direct enforcement authority. The final Title V permits issued by the District will contain both federally enforceable and District-only requirements.

District-only requirements are not addressed in this template except for those used in streamlining of multiple requirements. District-only requirements used in streamlining of multiple requirements will become federally enforceable. Table 1, Applicable Requirements, does not necessarily include all federally enforceable requirements that apply to tanks qualifying to use this template, and it is the source’s responsibility to determine any and all applicable requirements to which

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the source is subject. Generally, requirements not addressed by this template are those that require a source-specific analysis, or are covered by other templates.

Table 1 Applicable Requirements

Rule Category	Rule/Regulation	Citation	Description
A	SJVUAPCD Reg. IV	4623	Storage of Organic Liquids
A	NSPS Subpart Kb	40CFR60 60.110b	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification commenced after July 23, 1984
A	SJVUAPCD Reg. II	2520, 9.5.2	Federally Mandated Operating Permits
B	SJVUAPCD Reg. II	2201	New Source Review Rule
B	SJVUAPCD Reg. II	2520	Federally Mandated Operating Permits
B	SJVUAPCD Reg. IV	4101	Visible Emissions
B	NESHAP, Subpart CC	40CFR63	Petroleum Refineries
B	NESHAP, Subpart F	40CFR63	Synthetic Organic Chemical Manufacturing Industry
B	NESHAP, Subpart I	40CFR63	Certain Processes Subject to the Negotiated Regulation for Equipment Leaks
C	SJVUAPCD Reg. IV	4661	Organic Solvents
C	SJVUAPCD Reg. IV	4801	Sulfur Compounds
C	NSPS Subpart K	40CFR60 60.110	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978
C	NSPS Subpart Ka	40CFR60 60.110a	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984

Category “A” rules contain requirements that are directly applicable to the qualifying units; compliance with these applicable requirements will be demonstrated in this engineering evaluation and assured by the template permit conditions. In section IV, Compliance, the federally-enforceable requirements from category “A” rules are listed with a discussion of how compliance with these requirements is achieved.

Category “B” rules contain federally enforceable requirements that were not addressed in this template. These may not be all of the federally enforceable requirements for this unit. Requirements from these rules must be addressed, if applicable, by the applicant outside of this template within the Title V application Compliance Plan form (TVFORM-004). Category “B” listing is included in this table as an informational item to assist applicants in this effort.

Category “C” rules contain requirements which have been determined not to be applicable to qualifying units. A permit shield is proposed for the category “C”

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rules. An explanation of the determination of non-applicability of category “C” rules is included in the permit shield section of this evaluation.

IV. Compliance

This section contains a discussion of how compliance is assured with each requirement addressed in this template.

40CFR60, Subpart Kb

Section 60.112b requires that any storage vessel that:

Stores a volatile organic liquid which has a true vapor pressure less than 11 psia, and

Stores a volatile organic liquid which has a true vapor pressure of greater than or equal to 5.2 kPa (0.75 psia) for tanks with a storage capacity greater than or equal to 151 m³ (39,890 gallons), or

Stores a volatile organic liquid which has a true vapor pressure of greater than or equal to 27.6 kPa (4.0 psia) for tanks with a storage capacity Greater than or equal to 75 m³ (19,813 gallons) and 151 m³ (39,890 gallons)

be equipped with either a floating roof, a closed vent system and control device, or its equivalent. Tanks covered by this template are required to be equipped with an external floating roof meeting the specifications of 40CFR60, Subpart Kb. Template permit conditions will be added to require that tanks covered by this template are equipped with an external floating roof and proper closure seals. Template permit conditions will also be added for associated monitoring and recordkeeping, and reporting requirements. See template permit conditions #1, #2, #4-6, #17, #22, #35-52, #54-58, and #60.

Section 60.115b describes the start-up requirements for furnishing the APCO with a report describing the control equipment and certifies that the control equipment meets specifications. Start-up requirements were addressed in the initial application prior to commencement of construction. Therefore, this reporting will not be covered in the template.

District Rule 4623

District Rule 4623 has been submitted to the EPA to replace the old District Rule 463.2 which is SIP approved. Appendix B lists all of the applicable requirements of District Rule 4623 and shows which are included in the rule from the old SIP approved rule. This table shows that District Rule 4623 is as stringent as rule 463.2, thus rule 463.2 will subsumed by rule 4623 for the purposes of this template.

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This rule requires that all tanks with a storage capacity greater than 19,800 gallons, storing organic liquids with a true vapor pressure greater than 1.5 psia, have either a floating roof or vapor recovery system to control volatile organic compound (VOC) emissions. Units covered by this template control VOC emissions by using a tank with an external floating roof.

Section 5.1.1 requires that any tank with an external floating roof shall not store any organic liquid with a true vapor pressure of 11 psia or greater. See template permit condition #2.

Section 5.1.2 requires that any floating roof tank, with a capacity of 19,800 gallons or greater, storing an organic liquid be equipped with either a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents. This cover must have a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. See template permit condition #1. Section 5.1.3 require that the seal design meet certain criteria and be approved by the APCO prior to installation. Permit conditions #3, #7-16, #18-21, and #23-24 establish the guidelines for seal and cover design.

Section 5.1.5 requires all openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, to be equipped with a cover, seal or lid that is in a closed position at all times, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Permit conditions #25-34 establish the guidelines to ensure these requirements are met.

Section 6.0 requires periodic monitoring, testing and recordkeeping of tanks covered by this template. Periodic monitoring such as maintaining a record of the liquid stored, the storage temperature, the Reid vapor pressure of that liquid during the respective storage period, and associated testing will be required. See template permit conditions #52, #53.

District Rule 2520, 9.5.2

Section 9.5.2 requires all records be maintained for at least five years. Template permit condition #59 requires that all records be maintained for at least five years.

V. Permit Shield

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Title V permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed. A permit shield is requested in template permit condition #61.

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A permit shield will also be granted for 40CFR60 Subpart K and Ka because facilities qualifying to use this template commenced construction, modification, or reconstruction after July 23, 1984. These rules only apply to units that commence construction, modification, or reconstruction before this date. A permit shield is granted from these requirements in template permit condition #62.

A permit shield will also be granted for District Rule 4661. The provisions of this rule are limited to organic solvents. Organic solvents are defined in this rule as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers or cleaning agents. Tanks storing these liquids are excluded from this template in the template qualification form (see Appendix C). Therefore, this rule does not apply to units covered by this template. A permit shield is granted from this requirement in template permit condition #63.

A permit shield will also be granted for District Rule 4801. This rule specifies testing requirements for a stack source. Tank emissions are fugitive emissions not considered to come from a point source. Therefore, this rule does not apply to units covered by this template. A permit shield is granted from this requirement in template permit condition #63.

VI. Permit Conditions

The following conditions will be incorporated into the Title V permit of any facility choosing to make use of template #SJV-TK-13-0:

1. Upon initial start-up, the operator shall furnish the APCO with a report describing the control equipment and certifying the control equipment meets the specifications of 40CFR §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4). [40CFR 60.115b(b)(1)]
2. True vapor pressure of the organic liquid stored shall be less than 11 psia. [District Rule 4623, 5.1.1]
3. The tank shall be equipped with a cover consisting of either a pontoon-type or double-deck-type cover which rests upon the surface of the liquid being stored and is equipped with a closure device between the tank shell and roof edge consisting of a primary and a secondary seal. [District Rule 4623, 5.3.1]
4. Roof shall be floating on the liquid at all times (ie., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when tank is completely emptied and subsequently refilled. [40CFR 60.112b(a)(2)(iii)]
5. Primary seal (lower seal) shall be either a mechanical shoe seal or a liquid-mounted seal. [40CFR 60.112b(a)(2)(i) and 60.112b(a)(2)(i)(A)]

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6. Accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm^2 per meter of tank diameter, and the width of any gap shall not exceed 3.81 cm. [40CFR 60.113b(b)(4)(i)]

7. For a closure device, the gap between tank shell and primary seal shall not exceed: 1.) One and one-half (1-1/2) inches for a metallic-shoe-type seal on welded tanks; 2.) Two and one-half (2-1/2) inches for a metallic-shoe-type seal on riveted tanks; and 3.) One-half (1/2) inch for a resilient toroid type seal. [District Rule 4623, 5.1]

8. If this unit is a welded tank with a metallic-shoe-type seal, then the cumulative length of all gaps, between the tank shell and the primary seal: 1.) Greater than one-half (1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2.) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1]

9. If this unit is a riveted tank with a metallic-shoe-type seal, then the cumulative length of all gaps, between the tank shell and the primary seal: 1.) Greater than one and one-half (1-1/2) inch shall not exceed 10 percent of the circumference of the tank; and 2.) Greater than one-eighth (1/8) inch shall not exceed 30 percent of the circumference of the tank. [District Rule 4623, 5.1]

10. If this unit has a resilient toroid type seal, no gap between the tank shell and the primary seal shall exceed one-half (1/2) inch. The cumulative length of all gaps between the tank shell and the primary seal greater than one-eighth (1/8) inch shall not exceed 30 percent of the tank circumference. [District Rule 4623, 5.1.3.3.1]

11. The primary seal shall have no continuous gap greater than one-eighth (1/8) inch shall exceed 10 percent of the tank circumference. [District Rule 4623, 5.1.3.1.1, 5.1.3.2.1, and 5.1.3.3.1]

12. Gap between the tank shell and secondary seal shall not exceed one-half (1/2) inch. [District Rule 4623, 5.1.3.1.2, 5.1.3.2.2, and 5.1.3.3.2]

13. Cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference. [District Rule 4623, 5.1.3.1.2, 5.1.3.2.2, and 5.1.3.3.2]

14. If the primary seal is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches (61 cm) above the stored liquid surface. [District Rule 4623, 5.1.3.1.3 and 5.1.3.2.3]

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15. Primary seal envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric, shall have no openings, holes or tears. [District Rule 4623, 5.1.3.1.4, 5.1.3.2.4, and 5.1.3.3.3]
16. Secondary seal shall have no openings, holes or tears in the seal or seal fabric. [District Rule 4623, 5.1.3.1.4, 5.1.3.2.4, and 5.1.3.3.3]
17. Secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion. [40CFR 60.112b(a)(2)(i)(B)]
18. If the primary seal is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface. [District Rule 4623, 5.1.3.1.4 and 5.1.3.2.3]
19. If this unit is a welded tank with a metallic-shoe-type seal, the secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1.3.1.5]
20. If this unit is a riveted tank with a metallic-shoe-type seal, the secondary seal shall allow easy insertion of probes up to two and one-half (2-1/2) inches in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1.3.2.5]
21. If this unit has a resilient toroid type seal, the secondary seal shall allow easy insertion of probes up to one-half (1/2) inch in width in order to measure gaps in the primary seal. [District Rule 4623, 5.1.3.3.4]
22. Accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm. [40CFR 60.113b(b)(4)(ii)(B)]
23. Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal. [District Rule 4623, 5.1.3.1.6, 5.1.3.2.6, and 5.1.3.3.5]
24. Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [District Rule 4623, 5.1.6]
25. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface. [District Rule 4623, 5.1.5]

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26. All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall be equipped with a cover, seal or lid that shall be in a closed position at all times, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak. [District Rule 4623, 5.1.5]

27. All covers, seals and lids covering openings in the roof used for sampling and gauging, except pressure-vacuum valves set to within 10 percent of the maximum allowable working pressure of the roof, shall be inspected annually by the facility operator to ensure compliance with the provisions of this permit. However, if one or more of the components are found to leak during an annual inspection, the inspection frequency for that component type shall be changed from annual to quarterly. If none of the components of that type are subsequently found to be leaking during five consecutive inspections, the inspection frequency may be changed from quarterly to annual. Components located in inaccessible (over 15 feet above ground when access is required from the ground or over 6 feet away from a platform when access is required from the platform) locations shall be inspected at least annually and components located in unsafe areas shall be inspected and repaired at the next process unit turnaround (the scheduled shutdown of a unit for maintenance and repair work). [District Rule 2520, 9.4.2]

28. Operator shall determine the presence of VOC leaks by EPA Method 21. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 using the following calibration gases: 1) Zero air (less than 10 ppm of hydrocarbon in air); and 2) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rule 2520, 9.4.2]

29. A facility operator, upon detection of a leaking cover, seal, or lid, shall affix to that component a weatherproof readily visible tag bearing the date on which the leak is detected. The tag shall remain in place until the leaking component is repaired, reinspected and found to be in compliance with the requirements of this rule. [District Rule 2520, 9.4.2]

30. An operator shall reinspect a cover, seal or lid for leaks within thirty working days after the date on which the component is repaired. [District Rule 2520, 9.4.2]

31. Emissions from covers, seals and lids which have been tagged by the facility operator for repair within 15 calendar days or which have been repaired and are awaiting reinspection shall not be in violation of this permit. [District Rule 2520, 9.4.2]

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32. Any leak in a cover seal or lid shall be repaired to a leak-free condition within fifteen (15) calendar days of detection. The APCO may grant a ten (10) calendar day extension provided the operator demonstrates that necessary and sufficient actions are being taken to correct the leak within this time period. [District Rule 2520, 9.4.2]

33. If the leaking component is an essential part of a critical process unit which cannot be immediately shut down for repairs, the operator shall 1) Minimize the leak within 15 calendar days; and 2) If the leak which has been minimized still exceeds the concentration allowed by this permit, the essential component shall be repaired to eliminate the leak during the next process unit turnaround, but in no case later than one year from the date of the original leak detection. A critical process unit is any process unit which would result in the automatic shutdown of other process units if it were shut down. [District Rule 2520, 9.4.2]

34. Operator shall maintain an inspection log containing the following: 1) Type of component leaking; 2) Date of leak detection, and method of detection; 3) Date and emission level of recheck after leak is repaired; 4) Identification and location of essential parts of critical process units found leaking that cannot be repaired until the next process unit turnaround; and 5) Method used to minimize the leak from essential parts of critical process units which cannot be repaired until the next process unit turnaround. [District Rule 2520, 9.4.2]

35. Automatic bleeder vents shall be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. [40CFR 60.112b(a)(2)(ii)]

36. Rim vents shall be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. [40CFR 60.112b(a)(2)(ii)]

37. Operator shall perform gap measurements on primary seals during hydrostatic testing of the vessel or within 60 days of the initial fill with a volatile organic liquid (VOL) and at least once every 5 years thereafter. [40CFR 60.113b(b)(1)(i)]

38. Operator shall perform gap measurements on secondary seals within 60 days of the initial fill with VOL and at least once every year thereafter. [40CFR 60.113b(b)(1)(ii)]

39. If unit is out of service for a period of one year or more, subsequent refilling with volatile organic liquid shall be considered initial fill in accordance with the conditions of this permit. [40CFR 60.113b(b)(1)(iii)]

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40. Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present. [40CFR 60.113b(b)(5)]

41. If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL. [40CFR 60.113b(b)(6)(i)]

42. Operator shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. [40CFR 60.113b(b)(6)]

43. For all visual inspections required by this permit, the operator shall notify the APCO in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the APCO the opportunity to inspect the storage vessel prior to refilling, except when notification is specifically allowed otherwise by this permit. [40CFR 60.113b(b)(6)(ii)]

44. If a visual inspection required by this permit is not planned and the operator could not have known about the inspection 30 days in advance of refilling the tank, the operator shall notify the APCO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so it is received by the APCO at least 7 days prior to the refilling. [40CFR 60.113b(b)(6)(ii)]

45. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. [40CFR 60.112b(a)(2)(iii)]

46. Operator shall determine gap widths in the primary and secondary seals using the following procedure: 1) Measure seal gaps, at one or more floating roof levels when the roof is floating off leg supports; 2) Measure seal gaps around entire circumference of the tank in each place where a one-eighth (1/8) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location; 3) Total surface area of each gap shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance; 4) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank. [40 CFR 60.113a(a)(1)(ii) and (iii)]

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47. Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, raw data obtained in the measurement process in accordance with the conditions of this permit. [40CFR 60.115b(b)(3)]

48. Within 60 days of performing the seal gap measurements required by this permit, the operator shall furnish the APCO with a report containing the date of measurement, raw data obtained in the measurement process, and all such gap calculations as required by this permit. [40CFR 60.115b(b)(2)]

49. After each seal gap measurement that detects gaps exceeding any limit of this permit, the operator shall submit a report to the APCO within 30 days of the inspection. The report will identify the vessel and contain the date of measurement, raw data obtained in the measurement process, all such gap calculations as required by this permit, and the date the vessel was emptied or the repairs made and the date of repair. [40CFR 60.115b(b)(4)]

50. If the seals do not meet the required specifications of this permit, operator shall repair or empty the storage vessel within 45 days of identification. [40CFR 60.113b(b)(4)]

51. Operator shall maintain, for the life of the source, a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40CFR 60.116b(a) and (b)]

52. Operator shall keep a record of liquids stored in each container, period of storage, storage temperature, the Reid vapor pressure and the maximum true vapor pressure of such liquids. [District Rule 4623, 6.1.1 and 40CFR 60.116b(c)]

53. True vapor pressure of crude oil or refined petroleum products shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100 °F true vapor pressure shall be determined by Reid vapor pressure at 100 °F and ARB approved calculations. [District Rule 4623, 6.2.2]

54. Operator shall determine the true vapor pressure of each type of crude oil, with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method, using available data and record if the estimated maximum true vapor pressure is greater than 0.5 psia. [40CFR 60.116b(e)(2)]

55. Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879-83, or by using an appropriate method approved by EPA. [40CFR 60.116b(e)(3)]

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56. For vessels operated above or below ambient temperatures, the operator shall determine the maximum true vapor pressure as calculated based upon highest expected calendar month average of the storage temperature. For vessels operated at ambient temperature, the maximum true vapor pressure shall be calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service. [40CFR 60.116b(e)(1)]

57. Maximum true vapor pressure for crude oil or refined petroleum products may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40CFR 60.116b(e)(2)(i)]

58. Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit. [40CFR 60.116b(f)]

59. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years, except as otherwise specified by this permit. [District Rule 2520, 9.5.2]

60. Operator of each storage vessel, either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 0.75 psia or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40CFR 60.116b(d)]

61. Compliance with permit conditions in the Title V permit shall be deemed compliance with SJVUAPCD Rule 4623 (Amended December 17, 1992) and 40CFR60, Subpart Kb (except 60.115b(b)(1)). A permit shield is granted from this requirement. [District Rule 2520, 13.2]

62. The requirements of 40CFR60 Subpart K and Ka do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2]

63. The requirements of SJVUAPCD Rule 4661 (Amended December 17, 1992) and 4801 (Amended December 17, 1992) do not apply to this source. A permit shield is granted from these requirements. [District Rule 2520, 13.2]

APPENDIX A

EPA COMMENTS / DISTRICT RESPONSE
FOR
TEMPLATE # SJV-TK-13-0

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EPA COMMENTS / DISTRICT RESPONSE

The EPA's comments regarding tank templates are encapsulated below followed by the District's response. A copy of the EPA's 12/3/96 letter is available at the District.

A. General Comments

1. EPA COMMENT

In all of the templates, the first paragraph should be revised to clarify that federally enforceable requirements in Title V permits will be enforceable not only by EPA and the public, but by the District as well.

DISTRICT RESPONSE

The first paragraph of the templates will be reworded as follows:

Units may be subject to "federally enforceable" requirements as well as requirements that are enforceable by the "District-only." Federally enforceable requirements will be enforceable by the EPA, the District, and the public through Title V permit conditions identified as federally enforceable. District-only requirements represent local or state regulations for which the EPA has no direct enforcement authority. The final Title V permits issued by the District will contain both federally enforceable and District-only requirements.

2. EPA COMMENT

In template Series 1 to 10, the second paragraph of the applicable requirements should be revised so as to be consistent with the language in the other templates.

DISTRICT RESPONSE

The second paragraph of these series will be revised to read as follows:

"District-only requirements are not addressed in this template except for those used in streamlining of multiple requirements. District-only requirements used in streamlining of multiple requirements will become federally enforceable. Table 1, Applicable Requirements, does not necessarily include all federally enforceable requirements that apply to tanks qualifying to use this template, and it is the source's responsibility to determine any and all applicable requirements to which the source is subject. Generally, requirements not addressed by this template are those that require a source-specific analysis, or are covered by other templates".

3. EPA COMMENT

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Rule 4623 is the renumbered version of District Rule 463.2, which is the SIP-approved version of the rule. Permit conditions must be referenced to this SIP rule. In the analysis section of the template, the District may wish to explain that Rule 463.2 is the equivalent SIP-approved version of Rule 4623.

DISTRICT RESPONSE

The District will append a table to each template showing the rule numbers of the county SIP rules corresponding to the current District rules, and the permit conditions which show compliance with the provisions of those SIP rules. Also, in the compliance sections, it will be stated that Rule 4623 is a renumbering of the county SIP rules with no changes in requirements from those rules.

4. EPA COMMENT

The suggestion is made to include the various MACT standards that contain provisions for storage vessels in the list of Category “B” rules.

DISTRICT RESPONSE

Applicable MACT standards will be included in the list of Category “B” rules in future templates.

5. EPA COMMENT

Include the adoption date of rules included in the permit shield.

DISTRICT RESPONSE

Adoption dates of rules referenced in the templates will be included in the permit shields.

6. EPA COMMENT

Any sections of applicable requirements not addressed in the templates must be excluded from the permit shields.

DISTRICT RESPONSE

Affected sections will be excluded from the permit shields of these and all future templates.

7. EPA COMMENT

A general condition should be included in the permit conditions that states the definitions in the rules cited as the origin and authority for each permit condition.

DISTRICT RESPONSE

The District feels that the definitions in the rules are sufficient, as they were considered in previously approved templates. However, a condition will be added to all Title V permits stating that all terms are used as defined in the cited underlying requirement unless otherwise explicitly defined within a particular permit condition.

Template SJV-TK-13-0

8. EPA COMMENT

Either the templates or the Title V permit must include a requirement that reports of required monitoring be submitted at least every 6 months.

DISTRICT RESPONSE

Section 9.6.1 of District Rule 2520, as approved by EPA on 5/24/96, requires submittal of reports of any required monitoring at least every 6 months *unless a different frequency is required by an applicable requirement* (emphasis added). SJV-UM-0-0, the facility-wide template, includes a permit condition stating this requirement. Sources not using the facility-wide template will have this condition imposed in the Title V permit.

9. EPA COMMENT

The cite for the origin and authority of each permit condition should be specific to the provision (i.e. subsection) of the rule so it is clear what portion of the applicable requirement is being addressed.

DISTRICT RESPONSE

Cites have been revised to include applicable subsections of requirements.

10. EPA COMMENT

The Template Qualification Forms (TQFs) for all tank templates ranging from Series 4 through Series 18 should include a question asking whether the tank is equipped with a pressure relief valve, as required by SIP Rule 463.2, and disallowing those units not so equipped from using the template.

DISTRICT RESPONSE

The qualifier referenced above will be changed to read as follows:

“Is this a tank with a capacity of 84,000 gallons or less of a small producer (as defined in District Rule 4623) with a daily throughput of less than 6,300 gallons per day, and equipped with a pressure relief device set to within 10 percent of the maximum working pressure of the tank? If “no”, continue to next question; otherwise STOP - you cannot use this template”.

11. EPA COMMENT

The compliance certification language must include the following language to be consistent with be consistent with part 70 requirements:

“Based on information and belief formed after reasonable inquiry 1) the information on this form is true, accurate, and complete and 2) the facility is in compliance with this template’s permit conditions.”

DISTRICT RESPONSE

The compliance certification language used in the templates previously approved by EPA was identical to that used in these templates. The District feels that the

Template SJV-TK-13-0

language should be left as is to be consistent with previously approved templates. The templates will be submitted as part of a complete Title V application. The Title V application contains a Compliance Certification Form (TVFORM-005 in the SJVUAPCD Title V Permit Application Package). On the Compliance Certification Form the responsible official certifies the truth, accuracy, and completeness of the Title V application, including all supporting information.

12. EPA COMMENT

The TQF should provide information on the origin and authority of the qualification terms.

DISTRICT RESPONSE

Citations have been added where missing or expanded as required.

13. EPA COMMENT

The District must be consistent with the underlying requirement when referring to capacity thresholds in the TQF.

DISTRICT RESPONSE

Such references have been reviewed and revised where necessary to achieve consistency with the language in the underlying requirement.

Series 13 Tanks

Permit Conditions

1. EPA COMMENT

The template should include the SIP provisions regarding the maximum distance for the gap between the tank shell and the primary seal (1.5 inches for metallic shoe / welded tanks; 2.5 inches for metallic shoe / riveted tanks; 0.5 inches for resilient toroid seals).

DISTRICT RESPONSE

The following condition has been added to the template:

For a closure device, gap between the tank shell and primary seal shall not exceed: 1.) One and one-half (1-1/2) inches for a welded tank with a metallic shoe primary seal; 2.) Two and one-half (2-1/2) inches for a riveted tank with a metallic shoe primary seal; and 3.) One-half (1/2) inch for any tank with a resilient toroid primary seal.

2. EPA COMMENT

The District must revise condition 3 as follows to be consistent with the requirement to section 60.112b(a)(2)(iii).

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“Roof shall be floating on the liquid at all times (i.e., off the roof leg supports) ~~at all times~~ except during initial fill until the roof is lifted off leg supports and when tank is completely emptied and subsequently refilled.”

DISTRICT RESPONSE

The permit condition discussed in the above comment has been modified to the following:

Roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when tank is completely emptied and subsequently refilled.

3. EPA COMMENT

Condition 14 is identical to condition 10.

DISTRICT RESPONSE

Condition 14 has been deleted from the template.

4. EPA COMMENT

The template should include the SIP requirement cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference.

DISTRICT RESPONSE

The following permit condition has been added to the template.

Cumulative length of all gaps between the tank shell and secondary seal greater than one-eighth (1/8) inch shall not exceed 5 percent of the tank circumference.

5. EPA COMMENT

Subpart Kb applies to volatile organic liquid storage vessels. Therefore, condition 29 must be revised as follows:

“...within 60 days of the initial fill with ~~petroleum~~ volatile organic liquid and at least once every year thereafter.”

DISTRICT RESPONSE

The permit condition discussed in the above comment has been modified to the following:

Operator shall perform gap measurements on secondary seals within 60 days of the initial fill with VOL and at least once every year thereafter.

6. EPA COMMENT

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Pursuant to section 60.113b(b)(1)(iii), condition 32 must specify that “subsequent refilling with petroleum liquid shall be considered initial fill for the purposed of conditions 28 and 29 of this template.”

DISTRICT RESPONSE

The permit condition discussed in the above comment has been modified to the following:

If unit is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill in accordance with the conditions of this permit.

7. EPA COMMENT

Condition 33 should clearly specify that the operator must record the “raw data obtained in the measurement process specified in conditions 34.C, and 34.D. In addition, the cite for condition 33 is 40 CFR 60.115b(b)(3) rather than 60.113b.

DISTRICT RESPONSE

The permit condition discussed in the above comment has been modified to the following:

Operator shall record the vessel on which the measurement was performed, date of the seal gap measurement, and raw data obtained in the measurement process in accordance with the conditions of this permit.

The correct reference has also been added accordingly.

8. EPA COMMENT

Condition 36 must also require a record of maximum true vapor pressure. (40 CFR 60.116b(c))

DISTRICT RESPONSE

The permit condition discussed in the above comment has been modified to the following:

Operator shall keep a record of liquids stored in each container, period of storage, storage temperature, the Reid vapor pressure and the maximum true vapor pressure of such liquids.

9. EPA COMMENT

Condition 37 must be revised, pursuant to section 60.116b(a), to require that the record showing the dimension of the storage vessel and the analysis showing the capacity of the vessel be maintained by the operator for the life of the source. Condition 42 should clarify that records be maintained for five years except as specified in condition 37.

Template SJV-TK-13-0

DISTRICT RESPONSE

The following condition has been added to the template:

Operator shall maintain, for the life of the source, a record showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years, except as otherwise specified by this permit.

10. **EPA COMMENT**

Condition 38 must refer to true vapor pressure, not total vapor pressure.

DISTRICT RESPONSE

The condition has been modified to refer to the true vapor pressure rather than the total vapor pressure.

11. **EPA COMMENT**

Condition 39 must delete APCO and instead insert Administrator.

DISTRICT RESPONSE

The permit conditions discussed in the above comment has been modified to the following:

Operator shall determine the true vapor pressure of each VOL, other than crude oil or refined petroleum products, from standard reference texts, by ASTM Method D2879-83, or by using an appropriate method approved by EPA.

12. **EPA COMMENT**

The template must contain a condition for section 60.116b(e)(1) regarding calculation of maximum true vapor pressure for vessels above or below ambient temperatures and for vessels operated at ambient temperatures.

DISTRICT RESPONSE

The following condition has been added to the template:

For vessels operated above or below ambient temperatures, the operator shall determine the maximum true vapor pressure as calculated based upon highest expected calendar month average of the storage temperature. For vessels operated at ambient temperature, the maximum true vapor pressure shall be calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

13. **EPA COMMENT**

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Pursuant to section 60.116b(f)(1), condition 40 must specify that the highest maximum true vapor pressure be determined using the methods describes in conditions 39, 43, and 44 and the condition that will be added to assure compliance with 40 CFR 60.116b(e)(1)

DISTRICT RESPONSE

The permit conditions discussed in the above comment has been modified to the following:

Operator of a tank storing a waste mixture of indeterminate or variable composition shall determine the highest maximum true vapor pressure for the range of liquid compositions to be stored prior to the initial filling, using methods specified for maximum true vapor pressure in this permit.

14. EPA COMMENT

Condition 3 must be revised to state “Maximum true vapor pressure for crude oil or refined petroleum products may be determined...and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO or the Administrator specifically request...” In addition, cite must refer to 40 CFR 60.116b(e)(2)(i).

DISTRICT RESPONSE

The permit conditions discussed in the above comment has been modified to the following:

Maximum true vapor pressure for crude oil or refined petroleum products may be determined from nomographs contained in API Bulletin 2517, by using the typical Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product, unless the APCO specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40CFR 60.116b(e)(2)(i)]

15. EPA COMMENT

Under condition 44, the threshold above which true vapor pressure of each type of crude oil must be determined and recorded is 0.5 psia rather than 1.0 psia as currently stated in the template.

DISTRICT RESPONSE

The permit conditions discussed in the above comment has been modified to the following:

Operator shall determine the true vapor pressure of each type of crude oil, with a Reid vapor pressure less than 2.0 psia or whose physical properties preclude determination by the recommended method, using available data and record if the estimated maximum true vapor pressure is greater than 0.5 psia.

Template SJV-TK-13-0

16. EPA COMMENT

Condition 44 must reference the authority in section 40 CFR 60.116b(e)(2), rather than that of 40 CFR 60.113(c)

DISTRICT RESPONSE

The reference has been added accordingly

17. EPA COMMENT

The template must be revised to include 40 CFR 60.115b(b) and 60.116b(d) regarding notifications to EPA.

DISTRICT RESPONSE

The following condition has been added to the template:

Upon initial start-up, the operator shall furnish the APCO with a report describing the control equipment and certifying the control equipment meets the specifications of 40CFR §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4).

Operator of each storage vessel, either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 0.8 psia or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure normally less than 4.0 psia, shall notify the APCO within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

However, the notification and reporting will be to the APCO and not the EPA. The reason for this is explained in comment #23.

18. EPA COMMENT

The template does not contain conditions for several provisions of subpart Kb. Because the template contains a shield for subpart Kb, conditions to assure compliance with the following provisions must be added:

Section 60.113b(b)(5): Notify the APCO 30 days in advance of any gap measurements to afford the APCO to opportunity to have an observer present.

Section 60.113b(b)(6)(i): If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal, seal fabric, the owner or operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL.

Section 60.113b(b)(6)(ii): Requirements for notifying the APCO in advance of visual inspections each time the vessel is emptied and degassed.

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DISTRICT RESPONSE

The following condition has been added to the template:

Operator shall notify the APCO 30 days in advance of any gap measurements required by this permit to afford the APCO opportunity to have an observer present.

If the external floating roof has defects, or the primary seal or secondary seal has holes, tears, or other openings in the seal or seal fabric, the operator shall repair the items as necessary so that none of these conditions exist before filling or refilling the storage vessel with VOL.

Operator shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

19. EPA COMMENT

Condition 45 provides a shield for subpart Kb. Part 70 requires that a shield may only be granted if the permit addresses the requirements being shielded. The template does not address the requirements of section 60.115b(b)(1) which requires the source to submit a report to the Administrator that describes the control equipment and certifies requirement is not addressed, condition 45 must state that the shield does not apply to section 60.115b(b)(1) of subpart Kb.

DISTRICT RESPONSE

See #1. A condition has been added to require that the source submit an operating plan upon startup per section 60.115b, and that the start-up requirements for furnishing the APCO with a report describing the control equipment and certifies that the control equipment meets specifications. The condition reads as follows:

Upon initial start-up, the operator shall furnish the APCO with a report describing the control equipment and certifying the control equipment meets the specifications of 40CFR §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4).

Section 60.115b will not be included in the permit shield because of the site-specific nature of the operating plan.

APPENDIX B

463.2 SIP DISTRICT RULE / 4623 DISTRICT RULE
COMPARISON
FOR
TEMPLATE # SJV-TK-13-0

Template SJV-TK-13-0

	4623 SJVUAPCD	463.2 old SIP Rule
EXEMPTIONS		
<p>The requirements of this rule shall not apply to ;</p> <p>For any tank designated for emergency standby, in existence prior to May 1, 1979, and which stores exclusively petroleum distillate or crude oil. Prior to return to emergency standby status, each tank shall be thoroughly drained. Each use of the tank shall not exceed 30 days. After a tank has been used (filled or partially filled) and draining of the tank has begun, any further filling of the tank shall constitute a separate use of the tank. The tank shall be equipped with a pressure relief device set to within ten (10) percent of the maximum allowable working pressure of the tank.</p> <p>If the unit is a tank with a capacity of less than 84,000 gallons or less of a small producer with a daily throughput of less than 6,300 gallons per day, and equipped with a pressure relief device set to within 10 percent of the maximum allowable working pressure of the tank.</p> <p>Temporary tanks, with capacities of 21,000 gallons or less, left on site for six months or less.</p> <p>Tanks, reservoirs or other containers which are pressure vessels maintaining working pressures sufficient at all times to prevent organic liquid loss or VOC loss to the atmosphere.</p> <p>If a new incineration device is required solely to comply with the requirements of this rule for existing tanks such device shall not be subject to the requirements of the New and Modified Stationary Source Review Rule provided the device includes BACT provisions for all air contaminants and the device is under District permit.</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>
REQUIREMENTS		
<p>Liquid stored has a TVP of 11 psia or greater under storage conditions</p> <p>No person shall place, store or hold in any floating roof tank of 19,800 gallons or greater, any organic liquid unless such tank, is equipped with; 1) a floating roof consisting of a pontoon-type or double-deck-type cover, 2) a closure device between the tank shell and roof edge consisting of two seals.</p> <p>Seal designs shall be submitted to the APCO and shall not be installed or used unless they are approved by the APCO as meeting the criteria set forth in the following.</p> <p>Metallic-shoe-type, welded tanks;</p> <p>No gap between the tank and primary seal shall not exceed 1 1/2 inches. The cumulative length of all gaps greater than 1/2 inch shall not exceed 10% of the circumference of the tank. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of tank circumference. No continuous gap greater than 1/8 inch shall exceed 10% of the tank circumference.</p> <p>No gap in the secondary seal shall exceed 1/2 inch. The cumulative length of all gaps greater than 1/8 inch shall not exceed 5% of the tank circumference.</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>	<p>X</p> <p>X</p> <p>X</p> <p>X</p> <p>X</p>

If the primary seal is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a		
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Template SJV-TK-13-0

minimum vertical distance of 24 inches above the stored liquid surface.	X	X
If the primary seal is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least eighteen inches in the vertical plane above the liquid surface.	X	X
The secondary seal shall allow easy insertion of probes up to one and one-half (1-1/2) inches in width in order to measure gaps in the primary seal.	X	X
Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal.	X	X
Metallic-shoe-type seal, riveted tank; No gap between the tank and primary seal shall not exceed 2 1/2 inches. The cumulative length of all gaps greater than 1 1/2 inch shall not exceed 10% of the circumference of the tank. The cumulative length of all primary seal gaps greater than 1/8 inch shall not exceed 30% of tank circumference. No continuous gap greater than 1/8 inch shall exceed 10% of the tank circumference.	X	X
No gap in the secondary seal shall exceed 1/2 inch. The cumulative length of all gaps greater than 1/8 inch shall not exceed 5% of the tank circumference.	X	X
If the primary seal is a metallic shoe, one end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 24 inches above the stored liquid surface. If the primary seal is a metallic-shoe-type seal, then the geometry of the shoe shall be such that the maximum gap between the shoe and the tank shell is no greater than double the gap allowed by the seal gap criteria for a length of at least 18 inches in the vertical plane above the liquid surface.	X	X
There shall be no holes or tears in, or openings in the envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric.	X	X
The secondary seal shall allow easy insertion of probes up to one and one-half (2-1/2) inches in width in order to measure gaps in the primary seal.	X	X
Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal.	X	X
Resilient toroid type seal; No gap between the tank and primary seal shall not exceed 1/2 inches. The cumulative length of all gaps greater than 1/8 inch shall not exceed 30% of the circumference of the tank. No continuous gap greater than 1/8 inch shall exceed 10% of the tank circumference	X	X

No gap in the secondary seal shall exceed 1/2 inch. The cumulative length of all gaps greater than 1/8 inch shall not exceed 5% of the tank circumference.	X	X
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Template SJV-TK-13-0

There shall be no holes or tears in, or openings in the envelope surrounding the annular vapor space enclosed by the roof edge, stored liquid surface, shoe, and seal fabric.	X	X
The secondary seal shall allow easy insertion of probes up to one and one-half (1/2) inches in width in order to measure gaps in the primary seal.	X	X
Secondary seal shall extend from the roof of the tank to the shell and not be attached to the primary seal.	X	X
The primary seal envelope shall be made available for unobstructed inspection by the APCO on an annual basis at locations selected along its circumference at random by the APCO. In the case of riveted tanks with toroid-type seals, a minimum of 8 locations shall be made available; in other cases a minimum of 4 locations shall be made available. If the APCO suspects a violation may exist the APCO may be necessary to determine the seal condition for its entire circumference.	X	X
All openings in the roof used for sampling and gauging, except pressure-vacuum valves which shall be set to within 10 percent of the maximum allowable working pressure of the roof, shall provide a projection below the liquid surface to prevent belching of liquid and to prevent entrained or formed organic vapor from escaping from the liquid contents of the tank and shall be equipped with a cover, seal, or lid. The cover, seal, or lid shall at all times be in a closed position, with no visible gaps and be gas-tight, except when the device or appurtenance is in use. Gas-tight shall be defined as emitting no more than 10,000 ppm of methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Emissions from gauging or sampling device covers in excess of this limit shall be considered a leak.	X	X
Each roof drain shall be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.	X	X
<u>Fixed roof tanks with internal floating roof</u> Liquid stored has a TVP of 11 psia or greater under storage conditions	X	X
No person shall place, store or hold in any floating roof tank of 19,800 gallons or greater, any organic liquid, light crude oil or petroleum distillate unless the internal floating roof is equipped with; 1) a floating roof consisting of a pontoon-type or double-deck-type cover, 2) a closure device between the tank shell and roof edge consisting of two seals.	X	X
<u>Fixed roof tanks with vapor recovery system</u> No person shall place, store or hold in any floating roof tank of 19,800 gallons or greater, any organic liquid, light crude oil or petroleum distillate unless the tank is equipped with a vapor loss prevention system, consisting of a system capable of collecting all VOC's, and a system for processing and for return to the storage or disposal of VOC's, so as to prevent their emission to the atmosphere at an efficiency of at least 95% by weight.	X	X
Any tank gauging or sampling device on a tank vented to the vapor recovery shall have gas-tight covers and closed at all times except during gauging or sampling.	X	X
All piping, valves and fittings shall be in a gas-tight conditions.	X	X
Storage in any above-ground tank of 19,800 gallons or less of gasoline unless		

Template SJV-TK-13-0

tank is equipped with a pressure relief device set to within 10% of the maximum allowable working pressure of the container or is equipped with a vapor loss control device which complies with the requirements of the above rules.	X	X
TEST METHODS		
True vapor pressure shall be measured using Reid vapor pressure ASTM Method D323-82 modified by maintaining the hot water bath at storage temperature. Where storage temperature is above 100°F true vapor pressure shall be determined by Reid vapor pressure at 100°F and ARB approved calculations.	X	X
True vapor pressure of crude oil with an API (American Petroleum Institute) gravity less than 30°, as determined by API 2547, may be determined by Headspace Gas Chromatography using the procedures from ARB Evaluation of a Method for Determining Vapor Pressures of Petroleum Mixtures by Headspace Gas Chromatography, October 1990.	X	X
Control efficiency shall be determined by a comparison of controlled emissions to those emissions which would occur from a fixed or cone roof tank in the same product service without a vapor recovery system. Emissions shall be determined based on tank emission factors in EPA Publication AP-42, component counts for fugitive emissions sources, recognized emission factors for fugitive emission sources and the efficiency of any VOC destruction device.	X	X
The efficiency of any VOC destruction device shall be measured by EPA Method 25, 25a, or 25b, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422.	X	X
RECORDKEEPING		
Keep an accurate record of liquids stored in each container, storage temperature of the Reid vapor pressure of such liquids.	X	X
Emergency standby tanks are exempt from the requirements of the requirements of the rule for floating roof tanks. Records shall be maintained as required by the rule and the date(s) liquid is first introduced to each tank and date(s) tank is fully drained. Such records shall be submitted to the APCO 60 days prior to permit renewal.	X	X
for tanks exempt to this rule the owner shall maintain monthly records of average daily throughout and shall submit such information to the APCO 30 day prior to annual permit renewal.	X	X

APPENDIX C

TEMPLATE QUALIFICATION FORM
FOR
TEMPLATE # SJV-TK-13-0

Template SJV-TK-13-0

Title V General Permit Template Qualification Form

District Permit # _____

Please answer the questions in the table below. A fixed roof tank (unit) which meets the criteria of this table is qualified to use this template as part of a Title V application. To use this template, remove this sheet and attach to application.

Yes	No	Description of Qualifying Units
		Is this unit equipped with an external floating roof and used for the storage of volatile organic liquids? [40CFR60.112b(a)(2)] If "yes", continue to next question; otherwise STOP - you cannot use this template.
		Does this unit have a storage capacity greater than or equal to 40 m ³ (10,567 gallons)? [40CFR60.110b(a)] If "yes", continue to next question; otherwise STOP - you cannot use this template
		Has construction, modification, or reconstruction commenced on this unit after July 23, 1984? [40CFR60.110b(a)] If "yes", continue to next question; otherwise STOP - you cannot use this template
		Does this unit store organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents? [District Rule 4661, 4.1] If "no", continue to next question; otherwise STOP - you cannot use this template.
		Is this unit a pressure vessel designed to operate in excess of 204.9 kPa (29.7 psi) and without emissions to the atmosphere? [40CFR60.110b(d)(2)] If "no" continue to next question; otherwise STOP - you cannot use this template
		Is this unit a vessel permanently attached to a vehicle such as a truck, rail car, barge, or ship? [40CFR60.110b(d)(3)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Is this unit a vessel with a design capacity less than or equal to 1589.874 m ³ (420,000 gallons) used for petroleum or condensate stored, processed, or treated prior to custody transfer? [40CFR60.110b(d)(4)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Is this unit located at a heavy oil test station in Kern County? [District Rule 4404] If "no", continue to next question; otherwise STOP - you cannot use this template.
		Is this unit a vessel located at a bulk gasoline plant? [40CFR60.110b(d)(5)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Is this unit a storage vessel located at gasoline service stations? [40CFR60.110b(d)(6)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Is this unit a vessel used to store beverage alcohol? [40CFR60.110b(d)(7)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Does this tank maintain working pressures sufficient at all times to prevent organic liquid loss or VOC loss to the atmosphere? [District Rule 4623, 4.1] If "no", continue to next question; otherwise STOP - you cannot use this template.
		Is this a temporary tank, with a capacity of 21,000 gallons or less, left on site for six months or less. [District Rule 4623, 4.2.3] If "no" continue to the next question; otherwise STOP - you cannot use this template.
		Is this a tank with a capacity of 84,000 gallons or less of a small producer (see District Rule 4623) with a daily throughput of less than 6,300 gallons per day, and equipped with a pressure relief device set to within 10 percent of the maximum working pressure of the tank? If "no", continue to next question; otherwise STOP - you cannot use this template.
		Is this unit an emergency standby tank, storage not exceeding 30 days at a time, in existence prior to May 1, 1979, which store exclusively petroleum distillates or crude oil? [District Rule 4623, 4.2.1] If "no", continue to next question; otherwise STOP - you cannot use this template.
		Is this unit a vessel at a coke oven by-product plant? [40CFR60.110b(d)(1)] If "no", continue to next question; otherwise STOP - you cannot use this template
		Does this unit have a true vapor pressure greater than 1.5 psia and less than 11 psia? [40CFR60.112(a)(1)] If "no", STOP - you cannot use this template; otherwise you qualify to use this template.

Based on information and belief formed after reasonable inquiry 1) the information on this form is true, accurate, and complete and 2) the facility is in compliance with this template's permit conditions:

Signature of Responsible Official

Date

Name of Responsible Official (Please Print)